

# Report from the opening of a new Radiopharmaceutical Production Center in Cracow, Poland, December 9, 2011

After opening a PET-CT-MRI center in June 10, 2011, the Voxel company started up a multiprofile Radiopharmaceutical Production Center in the compound of the military clinical hospital in Cracow. The entire project was supported by European funds within the Innovative Economy Operational Program. A modern style building saturated with technology was erected on a greenfield within six months.

The production zone contains a cyclotron located in a concrete bunker, 3 radiochemical laboratories (2 for regular production and 1 for research and development) and a quality control lab for the whole radiochemical production. The cleanrooms meet the strict GMP requirements and entire zone has controlled access.

In the initial phase of the production process radioisotopes are in a state-of-the-art GE Healthcare device, belonging to the PETtrace family. It can accelerate protons and deuterons to 16.5 MeV to 8.4 MeV respectively. Its configuration provides six target positions. The PET isotopes, which will be produced in the Ra-

diopharmaceutical Production Center, include  $^{18}\text{F}$ ,  $^{11}\text{C}$  and  $^{64}\text{Cu}$  which are automatically transferred to the radiochemistry processing systems for efficient conversion into finished radiotracers or precursors for use in preparing other labeled molecules. Two Niobium targets dedicated for the production of  $^{18}\text{F}$  isotope enable production of  $10\text{Ci } ^{18}\text{F}$  — in 2 hours using  $100\text{ }\mu\text{A}$  proton beam. This means that one bombardment daily covers FDG demand for potential clients and allows production of additional, innovative tracers in the following synthesis.

Depending on the production programme, the isotopes are delivered via capilar ducts to particular hot laboratory. The hotlabs maintain C class environment and are accessed through air locks.

The ceremony was attended by representatives of the Health Care sector, national and local authorities, representatives of the Parliament and Senate in Cracow as well as other prominent guests.

*Nuclear Medicine Review Editors*



Hot cells in the new radiopharmaceuticals production center in Cracow